

ENGINEERING STANDARDS UPDATE

[Standards are serious business](#), but this newsletter isn't.

Topics this month:

- **Training & Qual**
- **Interesting Global Construction Trivia**
- **Engineering Processes Changes**
- **Drillco Post-Installed Concrete Anchors (Nuclear/High-Confidence)**
- **LANL Standards Issued in December**
- **DOE 851 Rule and Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

The Standards Homepage: <http://engstandards.lanl.gov/>

TRAINING & QUAL

Electrical Standards Course – Wed, February 7

Four-hour course 17998 covers the electrical engineering standards in Chapter 7 of the LANL Engineering Standards Manual and discusses mandatory requirements and good practices for those involved in electrical design. Strongly suggested for electrical designers, electrical engineers, electrical safety officers, and facility managers. AEs are also encouraged to attend. Taught by Electrical Standards POC Eric Stromberg from 7:30–11:30 am, at White Rock Training Center TA-00-1308 Rm 117.

To register for LANL courses, sign up via [UTrain](#). Enter course number in search field, assign to yourself. Disenroll a similar way if you have to bail. AEs can also register; contact Yolanda Trujillo at 665-5696 or yitrujillo@lanl.gov with Z number.

INTERESTING GLOBAL CONSTRUCTION TRIVIA

From the International Code Council's Newsletter

Did you know?

There are about [3,700 oil derricks located throughout southern California, \[some\] disguised by fake structures](#) (links to 59-sec YouTube vid). The Packard Well site looks like a plain, windowless office building, but below the ground there are 51 wells producing 491,000 barrels of crude oil annually. Oil derricks are listed under structures that are exempt from a building permit in the California Building Code.

ENGINEERING PROCESSES CHANGES

The following Administrative Procedures have been posted on the AP [SharePoint site](#):

AP-341-502-R5	Management Level Determination and Identification of Quality Assurance and Maintenance Requirements Course 55428 (for those assigned) Selected changes: <ul style="list-style-type: none"> • Title previously only <i>Management Level Determination</i> • Deletes requirement of MLD review and approval by Safety Basis. • Revises ML-3 designation definition. • Multiple form eliminations and additions • Adds Attachment A, Management Level based Application of Procedures and Functional Series Documents to Facility Engineering. • Adds Attachment B for MLD of Component or Part. • Clarifies that this AP applies only to scope of work addressed by PD340, <i>Conduct of Engineering for Facility Work</i> 	Issued: 12/18/17	Effective: 02/07/18
AP-341-514-R0.1	Functionality Assessment Administrative change	Issued: 12/11/17	
AP-341-519-R4	Design Revision Control Posted sitewide VAR-10182, Alternate Method for IWR under an FCR, and new FM02A for same.	Issued: 12/12/17	
AP-341-626-R0.1	Design Interface Control Administrative changes only	Issued: 12/21/17	

Always ensure you are working to the latest revision being implemented by your facility. For questions about CoE engineering processes, please contact POC [Jeff Fauble](#) (5-0595) when he's back next week. For training questions, contact [Yolanda Trujillo](#) at 665-5696.

DRILLCO POST-INSTALLED CONCRETE ANCHORS (NUCLEAR/HIGH-CONFIDENCE)

Effective December 22, Drillco National Group is no longer active on the IESL, nor is considered a "Pre-Approved OEM" -- one that has been reviewed and approved by the QPA-IQ group for purchase from a pass-through distributor like Frank's Supply (see [June 2017 Update](#) article). This being the case, commercial grade dedication is the only avenue for procurement of these anchors; the practicality of this is being investigated, as are other suppliers' products. This is related to LANL Master Spec Section 05 0521.

LANL STANDARDS ISSUED IN DECEMBER

Master Specifications STD-342-200	
23 0593 R4, Testing, Adjusting and Balancing for HVAC	Updated Submittal Requirements, added directions for projects where LANL MOF-SU provides TAB, added statement for LANL to provide TAB Agency with copies of test reports submitted by sub-contractor. Thanks to Mechanical POC Michael Ladach and John Sur.
Cancelled Specs:	
40 0511 Compression Fittings on Copper and Stainless Steel Tubing	Cancelled due to overlap with new 40 0504 Process Piping that addresses installer qualifications and installation per manufacturer's recommendations.
40 0527 Piping and Tubing Inspection Checklist	There is no information contained in this specification that is not covered in the inspection requirements of the B31 and other codes of record for the specific projects

DOE 851 RULE AND TECHNICAL STANDARDS ACTION

In the DOE rulemaking arena, [10CFR851](#), Worker Safety and Health Program, was issued and is effective as of January 17, 2019. Compliance is required starting January 17, 2019 and the affected POCs will meet it.

STDs [activity](#) in the past month:

DOE-STD-1146-2017	General Technical Base Qualification Standard [used by the Feds]	Standard	EA - Enterprise Assessment	Dec 22, 2017
DOE-STD-3007-2017	Preparing Criticality Safety Evaluations at Department of Energy Nonreactor Nuclear Facilities	Standard	NA - National Nuclear Security Administration	Dec 20, 2017
DOE-STD-1227-2017	Local Insider Threat Working Group Structure, Roles, and Response Actions (OUO)	Standard	AU - Office of Environment, Health, Safety and Security	Dec 07, 2017

NATIONAL STANDARDS ACTION

IHS reports these changes:

Document number: **ACI 318**

Publication Date: 9/1/2014

Title: Building Code Requirements for Structural Concrete (ACI 318-14) and Commentary (ACI 318R-14)

Type of Change: Errata/Erratum

Document number: **ASME B31.9**

Publication Date: 12/29/2017

Title: Building Services Piping

Type of Change: Complete Revision

Document number: **AWS D9.1/D9.1M**

Publication Date: 1/1/2018

Title: Sheet Metal Welding Code

Status: Active

Type of Change: Complete Revision

Document number: **NEMA Z535.3**

Publication Date: 1/1/2011

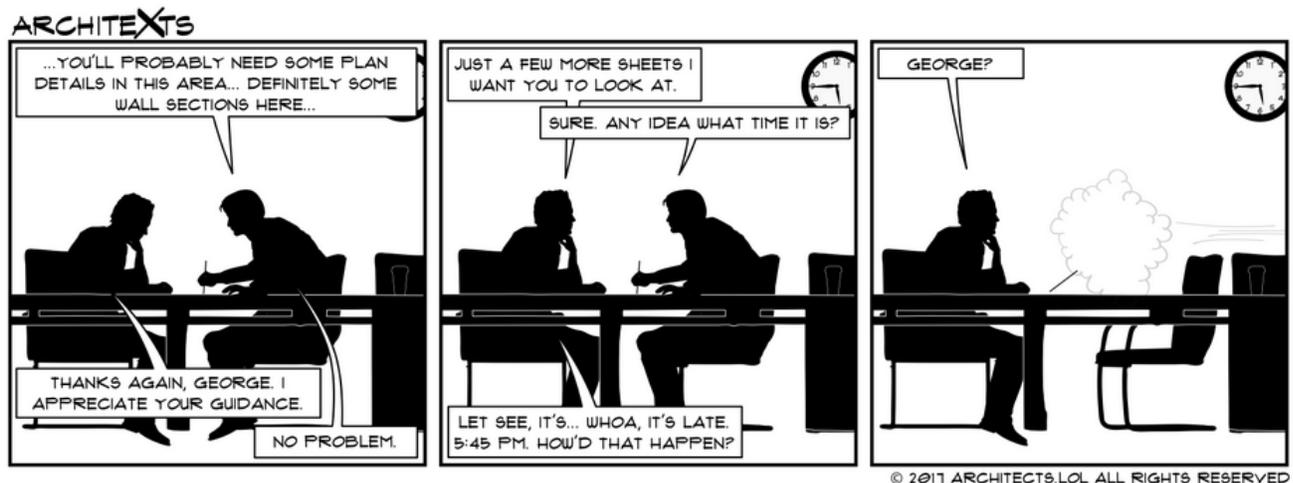
Reaffirmed/Reapproved Date: (R 2017)

Title: **Criteria for Safety Symbols**

Type of Change: Reaffirmed/Reapproved

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

ACCIDENTALLY WORKING LATE



LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "[Monthly Update](#)" on the [Standards homepage](#). Last month's topics:

- **New Conduct of Engineering Office Director**
- **Engineering Processes Changes**
- **Online National Standards Access**
- **Training & Qual**
- **LANL Standards Issued in November**
- **Receipt Inspection Criteria Changes**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

The views expressed in this email are not necessarily those of my employer.
To request a change to this newsletter's distribution, please contact me.

Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
(505) 665-8475 oruch@lanl.gov <http://engstandards.lanl.gov/>
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